REMARKS

A response to the first office action on the merits mailed June 18, 2004 is due on September 18, 2004. This response is being filed on September 17, 2004. Accordingly, this response is timely filed. Applicants respectfully request that the response submitted herewith be made of record in the present application

Claim Status

Claims 1-23 were originally filed in this application. Claims 1-23 are pending for examination.

ALLOWABLE SUBJECT MATTER

Applicants gratefully acknowledge the Examiners indication of allowable subject matter in claims 2-6, 9-11, 14-18 and 22-23.

CLAIM REJECTIONS

35 U.S.C. §102

Claims 1, 7-8, 12-13, 19-21 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Sawamoto et al. U.S. Patent 5,290,406. This rejection is respectfully traversed.

The Sawamoto et al. reference does not anticipate Applicant's claim 1 because the solid electrolyte of Sawamoto et al. is not "capable of fluorine ion exchange" as required by Applicant's claim 1. The solid electrolyte of Sawamoto et al. does not exchange fluorine ions in operation of the device; the device operates by proton exchange. Further, *fluorine ion exchange does not occur at all in the Sawamoto et al. device.* The solid electrolyte of Sawamoto et al. is incapable of fluorine ion exchange under any circumstances. What is referred to in the office action is the release of "fluorine-containing substances" see col. 3, line 48. The release of "fluorine-containing substances" is due to the break down of the solid-electrolyte fluoro-resin used by Sawamoto et al. by ozone-containing gas, see col. 3, lines 40-43 where it is recited "it is presumed that the generation of the fluorine-containing substances is attributable to decomposition by ozone of the surfaces of the fluororesin materials present in the in-exchange membrane. This is not fluorine ion exchange, but little particles of polymer breaking away.

As further evidence that the solid electrolyte of Sawamoto et al. is not capable of fluorine ion exchange, one can consider the electrolyte material of Sawamoto et al. This is listed as perfluorocarbonsulfonic acids and the like in col. 2, lines 64-65. These fluoro resins are simply not capable of fluorine ion exchange. The fluorine atoms in this polymer are bound very tightly to the carbon backbone, and will simply not exchange fluoride atoms.

Since Sawamoto et al. does not teach each and every limitation of Applicant's claims (specifically, there is no disclosure or suggestion of a solid electrolyte capable of fluorine ion exchange), it is respectfully requested that the rejection be withdrawn

Conclusion

Having overcome all rejections, Applicants respectfully requests that a timely Notice of Allowance be issued in this application. If a telephone conversation will expedite the prosecution of this application, the Examiner is kindly invited to call Applicant's representative at the telephone number listed below.

All fees believed due have been submitted. If Applicant is wrong in this assumption, the PTO is authorized to charge any deficiency to Applicant's account number 120690. The PTO is not authorized to charge the issue fee to this account.

Respectfully Submitted,

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